

REMARKS

The above-identified patent application has been amended and reconsideration and reexamination are hereby requested.

The examiner rejected claim 1 as obvious over Reeder and claim 2 as obvious over Reeder taken with Wang.

Applicant's claim 1 has been amended to broaden the claim. As amended, the claim is still distinct over Reeder. As amended claim 1 recites ... collecting data from a network device by a data collector associated with the network device and producing accounting records from the data ... transmitting the accounting records to first and second flow aggregation processes, ... and awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process.

These features are neither described nor suggested by Reeder. Reeder does not describe or suggest a system that collects data associated with a network device. Reeder also does not describe or suggest a system that produces accounting records from the data. Reeder also does not suggest transmitting of accounting records to first and second flow aggregation processes. Reeder also does not describe or suggest plural data collectors.

Rather, Reeder collects billing records that can occur through transactions with a client computer. Reeder is not directed to collecting data from a network device by a data collector associated with the network device. Reeder also does not suggest any flow aggregation process. Reeder has no teachings to aggregate account records pertaining to network traffic and hence has no teaching of transmitting the accounting records to first and second flow aggregation processes. Accordingly, claim 1 is distinct over Reeder.

Applicant's claim 2 also has been amended to broaden the claim. As amended, claim 2 is still distinct over Reeder and Wang. The examiner admits in this rejection that Reeder does not suggest plural data collectors, aggregation processes, and so forth. The examiner relies upon Wang to supply such teachings.

Claim 2 recites ... a plurality of data collectors disposed in a network, and which collect data pertaining to operation of the network from network devices. This feature is not described by Wang. Wang describes an billing generator that monitors an MIB (management information base that stores statistics from which accounting information can be generated). As such Wang does not describe or suggest a data collector. Moreover, Wang describes that "when a table is 90% full the data generator sends a trap to the billing collector associated with the particular switch ..." (col. 2 lines 50-55). As such Wang also does not suggest a first flow aggregation process, connected to the plurality of data collectors ... that send the collected data to the first flow aggregation process and ... the second flow aggregation process. Wang also does not describe that the data collectors dispose of the collected data only after receiving an acknowledgment that the data has been received by the first and second flow aggregation processes.

Applicant has added new claims that recite additional features of the invention. Claims 3-9 depend from claim 1 and are distinct over the art for at least the reasons discussed in claim 1. These claims additional distinct features. For example, claim 3 recites ... if the data collector determines that the flow aggregation process is not operating, the method ... continues to collect and store accounting records from the network device for future transmission to that flow aggregation process. This feature is not described by the combination of references.

Claim 4 recites that ... determining an error relating to the first flow aggregation process; and causing aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process. This feature is not described by the combination of references.

Claim 5 recites that the data collectors produce network accounting records (NARs) from collected data. This feature is not described by the combination of references.

Claim 6-9 also contain features not described by the combination of references.

Claims 10-16 contain features that are not described by the combination of references.

Claim 10 recites that the first and the second flow aggregation processes summarize related information from the received NARs across network devices. This feature is not described by the combination of references

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Claim 11 recites an error detection process that detects an error relating to the first flow aggregation process, to cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process. This feature is not described by the combination of references

Similarly, claims 12-17 claim features that are not described by the combination of references.

Claim 18 which recites instructions to cause a computer to collect data associated with a network device and produce accounting records from the data and transmit the accounting records to first and second flow aggregation processes to produce aggregate reports of the accounting records are not described by the references. Claim 18 adds additional features of instructions to ... await an acknowledgment signal ... before discarding the accounting records sent to the first flow aggregation process and determine an error relating to the first flow aggregation process to cause the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process.

Claims 19-23 add distinct features not suggested by the references.

Attached is a marked-up version of the changes being made by the current amendment.

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Applicant asks that all claims be allowed. Enclosed is a \$54 check for excess claim fees and a \$920 check for the Petition for Extension of Time fee. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

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Version with markings to show changes made

In the claims:

Claims 1 and 2 have been amended as follows:

(Amended) 1. A method of transmitting accounting records in an accounting system that produces information pertaining network traffic flow comprising:

collecting data from a network device by a data collector associated with the [a] network device and [to produce normalized] producing accounting records from the data; [and]

transmitting the accounting records to first and second flow aggregation processes, with transmitting further comprising for each flow aggregation process:

storing in the data collector the [normalized] accounting records;

transmitting the [normalized] accounting records to the flow aggregation process and

awaiting an acknowledgment signal from the flow aggregation process that the flow aggregation process received the accounting records before discarding the accounting records sent to the flow aggregation process]; and if the data collector determines that the flow

aggregation process is not operating, the data collector;

continuing to collect and store records from the network device for future transmission to that flow aggregation process, if the data collector does not receive an acknowledgment signal in response to transmitting the records to the flow aggregation process; and

determining an error relating to the first flow aggregation process, and causing aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process].

),

(Amended) 2. A system, including an accounting module, comprising:

a plurality of data collectors disposed in a network, and which collect data pertaining to operation of the network from network devices;

a first flow aggregation process, connected to [a] the plurality of data collectors, wherein the data collectors [collect data from network devices, and] send the collected data to the first flow aggregation process; and

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wherein the data collectors dispose of the collected data only after receiving an acknowledgment that the data has been received with the first flow aggregation process [processes] processing the data to generate aggregated records; and

a second flow aggregation process, connected to the data collectors, wherein the data collectors send the collected data to the second flow aggregation process, and dispose of the collected data only after receiving an acknowledgment that the data has been received, with the second flow aggregation process [processes] processing the data to generate aggregated records [and

an error detection module detecting an error relating to the first flow aggregation process, and causing the aggregate reports from the second flow aggregation process to be sent to the accounting module in place of the aggregate reports from the first flow aggregation process].